

LISTING OF CLAIMS:

This listing of claims replaces all previous listing of claims:

Claims 1-49 (Cancelled)

50. (Currently Amended) A cardiac tissue ablation apparatus comprising:

first and second jaws jaw assemblies, the jaws jaw assemblies being relatively moveable between open and closed positions, respectively, to receive and compress cardiac tissue therebetween; each jaw jaw assembly having a clamping surface with a width and an elongated electrically conductive member for ablating tissue between the jaws jaw assemblies, the conductive members of the jaws jaw assemblies being in face-to-face relation and connectible to a bipolar energy power source so as to be of opposite polarity when so connected for providing an electrical current through a selected tissue ablation area that is located between the jaws jaw assemblies, the conductive members each having a tissue contacting portion, which portion has a width that is less than the width of the clamping surface of its associated jaw jaw assembly to contact at least a portion of the selected ablation area; and

each jaw assembly including at least one internal jaw support member and including an insulative cover that surrounds the internal jaw support member.

~~said apparatus further comprising at least one temperature sensor associated with at least one jaw and disposed to sense the temperature of cardiac tissue at a location laterally spaced from the tissue contacting portions of the conductive members, such that the temperature sensor can detect undesired thermal spread in the compressed tissue that is located outside of the selected ablation area.~~

Claims 51-53 (cancelled)

54. (Previously Presented) The apparatus of claim 50 wherein each tissue contacting portion has a width that is less than or equal to about one-third the width of the associated clamping surface.

55. (Previously Presented) The apparatus of claim 50 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the conductive members is between approximately 0.12 to 0.6 mm in width.

56. (Previously Presented) The apparatus of claim 50 wherein each conductive member is generally centrally located relative to the associated clamping surface.

57. (Previously Presented) The apparatus of claim 50 in which at least one of the conductive members defines an interior lumen.

58. (Previously Presented) The apparatus of claim 50 in which a portion of the clamping surface is disposed on each side of the conductive member.

Claims 59-66 (Cancelled)

67. (New) The apparatus of claim 50 wherein each jaw assembly includes an opening disposed for receiving the respective conductive member therein.

68. (New) The apparatus of claim 50 wherein each respective insulative cover includes an opening disposed for receiving the respective conductive member therein.

69. (New) The apparatus of claim 50 wherein each insulative cover is located on each side of the respective elongated conductive member of the corresponding jaw assembly and forms the clamping surface.

70. (New) The apparatus of claim 50 wherein each jaw assembly includes two or more jaw support members.

71. (New) The apparatus of claim 50 wherein each elongated conductive member protrudes through an opening in the respective insulative cover.

72. (New) The apparatus of claim 50 wherein each elongated conductive member is substantially flush with the respective clamping surface.

73. (New) The apparatus of claim 50 wherein each respective insulative cover includes a groove disposed for receiving the respective conductive member therein.